

UTAH OIL AND GAS CONSERVATION COMMISSION

REMARKS: WELL LOG ELECTRIC LOGS ☒ WATER SANDS LOCATION INSPECTED SUB. REPORT/abd.

980204 LA'D 246 1.30.98

DATE FILED SEPTEMBER 1, 1995

LAND: FEE & PATENTED

STATE LEASE NO.

PUBLIC LEASE NO.

UTU-69403

INDIAN

DRILLING APPROVED: OCTOBER 3, 1996

SPUDDED IN:

COMPLETED: 1.30.98 LA'D PUT TO PRODUCING:

INITIAL PRODUCTION:

GRAVITY A.P.I.

GOR:

PRODUCING ZONES:

TOTAL DEPTH:

WELL ELEVATION:

DATE ABANDONED:

1.30.98 LA'D

FIELD:

WILDCAT

UNIT:

COUNTY:

EMERY

WELL NO.

FERRON FEDERAL 14-10-18-8

API NO. 43-015-30267

LOCATION

589 FSL

FT. FROM (N) (S) LINE,

1856 FWL

FT. FROM (E) (W) LINE.

SE SW

1/4 - 1/4 SEC.

10

TWP.

RGE.

SEC.

OPERATOR

TWP.

RGE.

SEC.

OPERATOR

18S

8E

10

CHANDLER & ASSOCIATES

CONFIDENTIALForm 3160-3
(December 1990)SUBMIT IN TRIPLICATE*
(Other instructions on
reverse side)Form approved.
Budget Bureau No. 1004-0136
Expires: December 31, 1991UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT**APPLICATION FOR PERMIT TO DRILL OR DEEPEN**

1a. TYPE OF WORK

DRILL ☒DEEPEN ☐

b. TYPE OF WELL

OIL
WELL ☐GAS
WELL ☒

OTHER

SINGLE
ZONE ☐MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Chandler & Associates, Inc.

3. ADDRESS AND TELEPHONE NO.

303-295-0400

475 Seventeenth St., Suite 1000 Denver, CO 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)

At surface

589' FSL 1856' FWL (SE 1/4 SW 1/4)

At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

See Topo Map "A" (attached)

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any)

875'

16. NO. OF ACRES IN LEASE

960

17. NO. OF ACRES ASSIGNED
TO THIS WELL

160

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

19. PROPOSED DEPTH

2200'

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

5865' GR

22. APPROX. DATE WORK WILL START*

A.S.A.P.

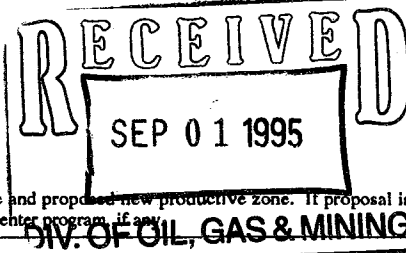
23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8"	24#	300'	(See attached Drilling Plan)
7 7/8"	5 1/2"	15.5#	2200'	(See attached Drilling Plan)

COPY

1. M.I.R.U.
2. Drill to T.D. 2200'
3. Run 5 1/2" casing if commercial production is indicated
4. If dry hole, well will be plugged and abandoned as instructed by B.L.M.
5. Well will be drilled with air/mist to T.D. mud will be in place to run 5 1/2" casing.

I hereby certify that I am responsible by the term and conditions of the lease to conduct lease operations. Bond coverage for lease activities is being provided by Chandler & Associates, Inc. B.L.M. Bond # 124290364.



IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout prevention program, if any.

24.

SIGNED

Robert L. Kay

TITLE Agent for Chandler

DATE 8-30-95

(This space for Federal or State office use)

PERMIT NO.

43-015-30267

APPROVAL DATE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY

Matthews

TITLE

Petroleum Engineer

DATE

10/3/96

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

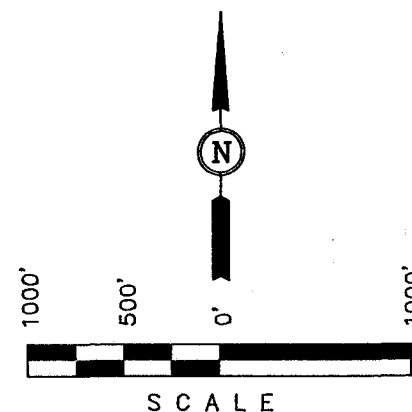
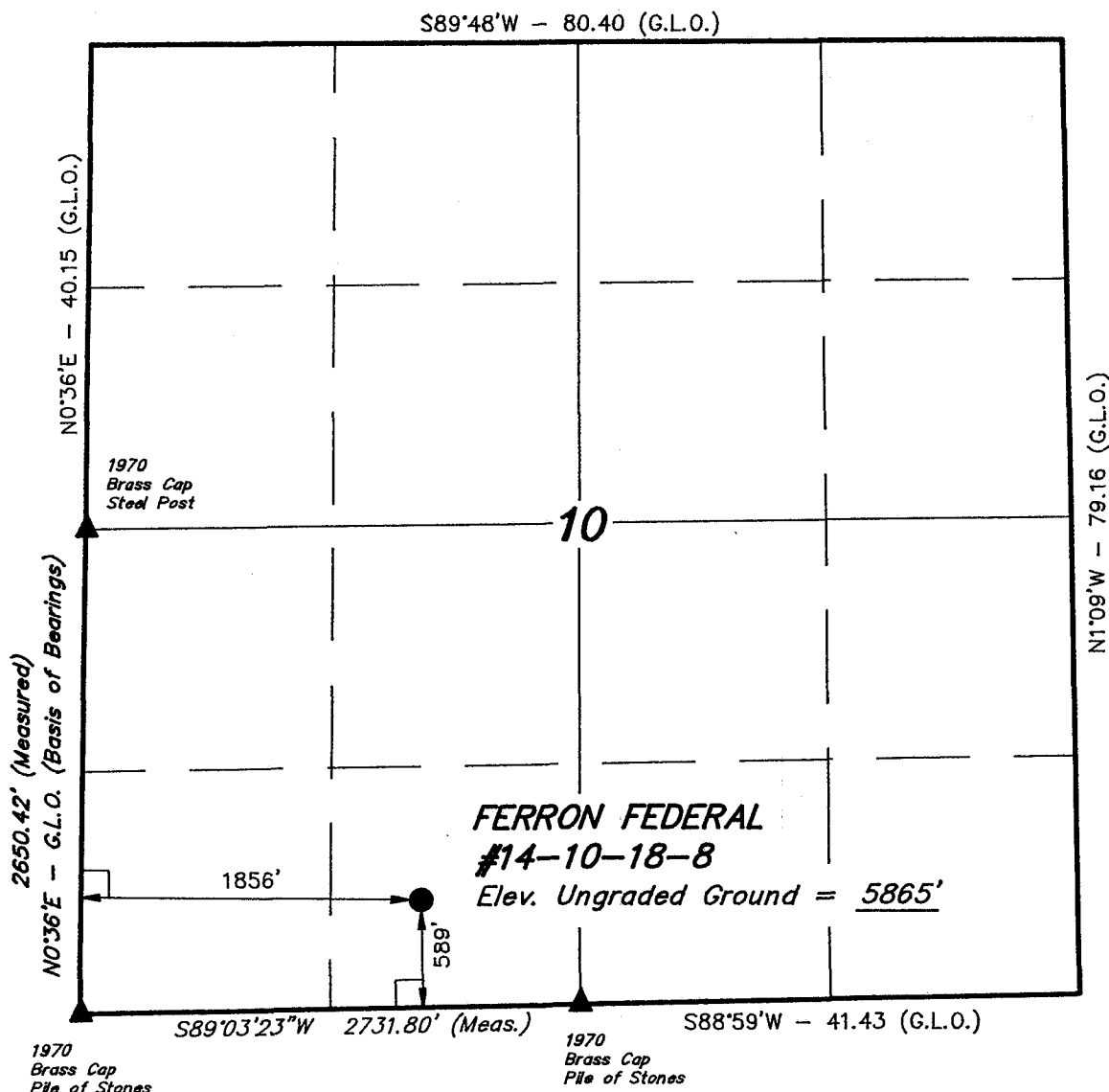
T18S, R8E, S.L.B.&M.

CHANDLER & ASSOCIATES, INC.

Well location, FERRON FEDERAL #14-10-18-8, located as shown in the SE 1/4 SW 1/4 of Section 10, T18S, R8E, S.L.B.&M. Emery County, Utah.

BASIS OF ELEVATION

SPOT ELEVATION AT THE SOUTHWEST CORNER OF SECTION 9, T18S, R8E, S.L.B.&M. TAKEN FROM THE RED POINT QUADRANGLE, UTAH, EMERY COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 6160 FEET.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Robert L. Kay
REGISTERED LAND SURVEYOR
REGISTRATION NO. 161319
STATE OF UTAH

UINTAH ENGINEERING & SURVEYING
85 SOUTH 200 EAST - VERNAL, UTAH 84078
(801) 789-1017

LEGEND:

- = 90° SYMBOL
- = PROPOSED WELL HEAD.
- = SECTION CORNERS LOCATED.

SCALE 1" = 1000'	DATE SURVEYED: 8-4-95	DATE DRAWN: 8-29-95
PARTY D.A. C.G. D.R.B.	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE CHANDLER & ASSOCIATES, INC.	

CHANDLER & ASSOCIATES, INC.
DRILLING PLAN FOR THE
FERRON FEDERAL #14-10-18-8

I. DRILLING PLAN:

1. Geological Surface Formation: EMERY

2. Estimated Tops:

<u>Name</u>	<u>Top</u>	<u>Prod. Phase Anticipated</u>
Bluegate	15'	
Ferron Ss	1850'	Gas
Tununk Sh	2050'	
TD	2200'	

3. CASING PROGRAM:

	<u>Depth</u>	<u>Hole Size</u>	<u>Csg. Size</u>	<u>Type</u>	<u>Weight</u>
Surface	300'	12-1/4"	8-5/8"	J-55	24#/ft (new)
Prod.	2200'	7-7/8"	5-1/2"	J-55	15.5#/ft (new)

4. Operator's Specification for Pressure Control Equipment:

- A. 2,000 psi W.P. Double Gate BOP or Single Gate BOP (Schematic attached).
- B. Functional test daily.
- C. All casing strings shall be pressure-tested (0.2 psi/foot or 1500 psi, whichever is greater) prior to drilling the plug after cementing; test pressure shall not exceed the internal yield pressure of the casing.
- D. All ram-type preventers and related control equipment shall be tested at the rated working pressure of the stack assembly or at 70 percent of the minimum internal yield pressure of the casing, whichever is less. Tests shall be done at the time of installation, prior to drilling out, and weekly. All tests shall be for a period of 15 minutes.

Chandler & Associates, Inc.
Ferron Federal #14-10-18-8

5. Auxiliary Equipment:

- A. Kelly Cock - yes.
- B. Float at the bit - no.
- C. Monitoring equipment on the mud system - visually.
- D. Full opening safety valve on rig floor - yes.
- E. Rotating head - no.
- F. The blooie line shall be a least 6" in diameter and extend at least 100' from the wellbore into the reserve/blooie pit.
- G. Blooie line ignition shall be provided by a continuous pilot (ignited when drilling below 500').
- H. Compressor shall be tied directly to the blooie line through a manifold.
- I. A mistor with a continuous stream of water shall be installed near the end of the blooie lines for dust suppression.

6. Proposed Circulating Medium:

<u>Depth</u>	<u>Mud Type</u>	<u>Density</u> <u>(lb./gal)</u>	<u>Viscosity</u>	<u>Water Loss</u>
0'-2050'	Air/Mist	-	-	-
TD	KCL Water			

7. Testing, Logging, and Coring Program:

- A. Cores - None anticipated.
- B. DST - none anticipated.
- C. Logging - DIL-GR (TD to base of surface casing).
FDC-CNL-GR-Cal (TD to base of surface casing).

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D. Formation and Completion Interval: Ferron interval, final determination of completion will be made by analysis of logs.
Stimulation - Stimulation will be designed for the particular area of interest as encountered.

E. Frac gradient - approximately .80 psi/ft.

8. Cementing Program:

<u>Casing</u>	<u>Volume</u>	<u>Type & Additives</u>
Surface	150 sx	Class "G" (based on 100% access)
Production	220*	180 sx 50-50 poz, plus 40 sx class "G".

Cement Characteristics:

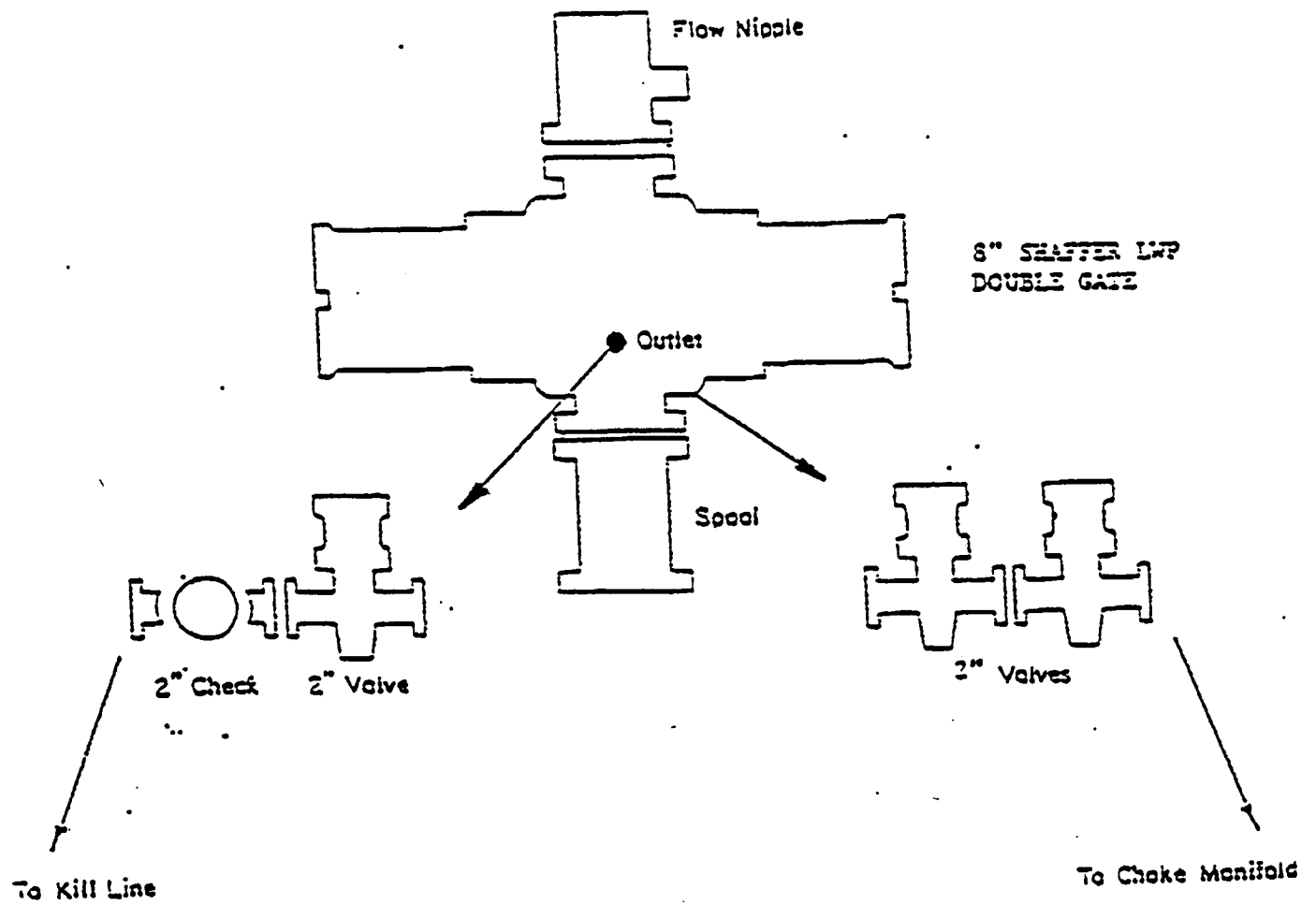
Class "G" - yeild = 1.18 cu.ft. per. sack
weight = 15.8 lb./gal
strength = 3200 psi in 72 hrs @ 135 degrees

* Final cement volumes to be calculated from caliper log with an attempt to be made to circulate cement to the surface. A bond log will be run across the zone of interest and across zones as required by the authorized officer to insure protection of natural resources.

9. Anticipated Abnormal Pressures and Temperatures, Other Potential Hazards:

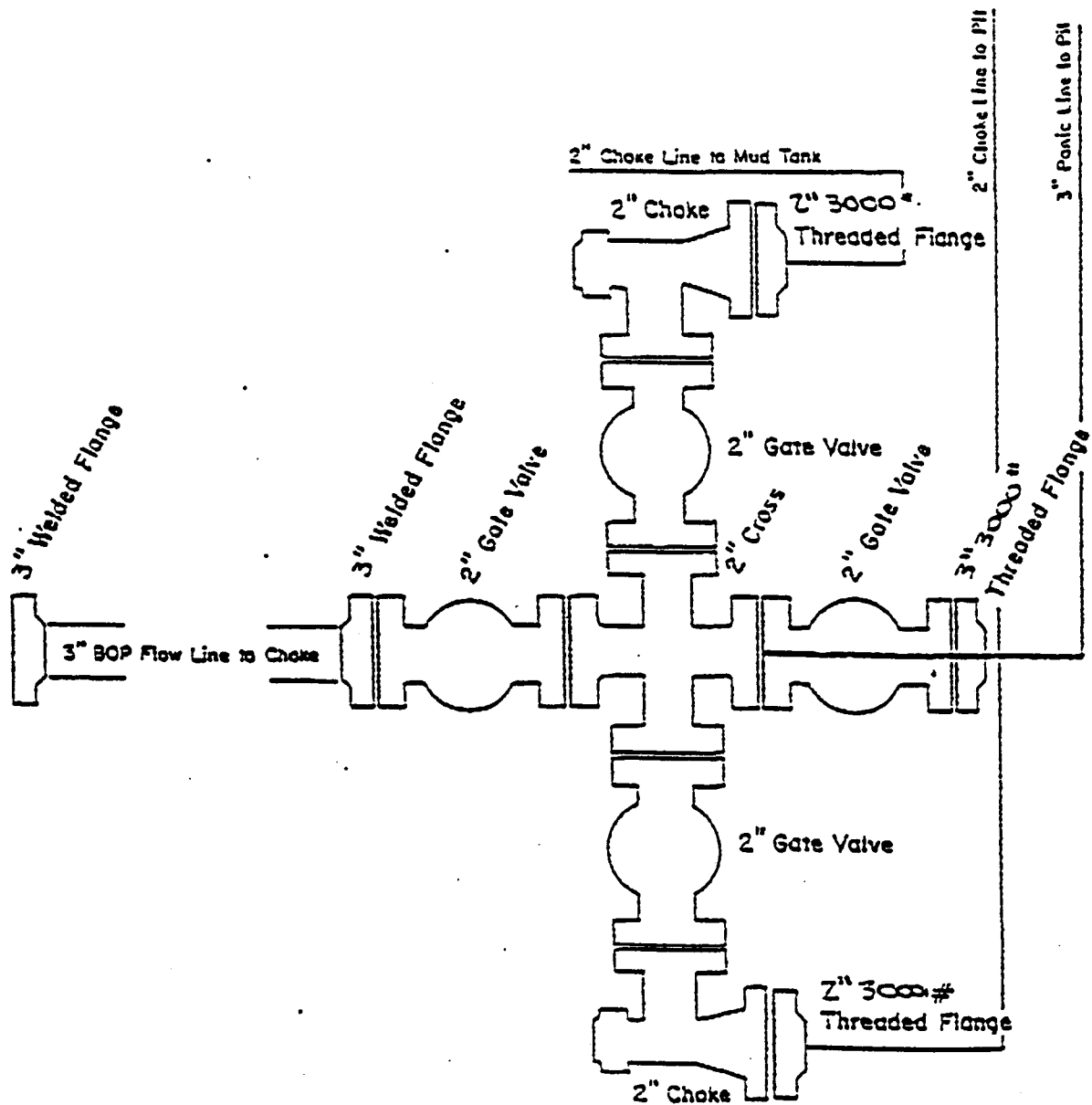
No abnormal temperatures or pressures are anticipated. No H₂S has been encountered in or known to exist from previous wells drilled to similar depths in the general area. Maximum anticipated bottom hole pressure equals approximately 1,500 psi (calculated at 0.682 psi/ft) and maximum anticipated surface pressure equals approximately 1016 psi (bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/ft).

CHANDLER DRILLING
RIG NO.7



CHANDLER DRILLING

RIG NO.7



II. SURFACE USE PLAN
CHANDLER & ASSOCIATES, INC.
FERRON FEDERAL 14-10-18-8

1. Existing Road:

- A. Topo Map "A" is the vicinity map, showing the access routes from Castle Dale, Utah.
- B. Topo Map "B" shows the proposed access road to the well location. It also shows existing roads in the immediate area.
- C. The existing and proposed access road, unless otherwise stated, shall be crowned, ditched, and dipped from the nearest improved road.
- D. Occasional maintenance blading and storm repairs will keep roads in good condition.
- E. There shall be no mud blading on the access road. Vehicles may be towed through the mud provided they stay on the roadway.

2. Planned Access Roads:

The proposed access road, will be crowned, ditched, and dipped.

- A. Maximum grade will be 8% or less, unless otherwise stated.
- B. No turnouts will be required.
- C. Low water crossings to be placed in Proposed Access road during drilling process and culverts may be installed at a later date.
- D. Road surface material will be that native to the area.

Chandler & Associates, Inc.
Ferron Federal #14-10-18-8

- E. No cattleguard will be required.
- F. The proposed access road was flagged at the time the location was staked.
- G. The area authorized officer will be contacted at least 48 hours prior to commencing construction of the access road and well pad.
- H. The backslopes of the proposed access roads will be no steeper than vertical or 1/4:1 in rock; and 2:1, elsewhere.

The operator or his contractor will notify the B.L.M. office at least 48 hours prior to commencement of any work on these locations, roadways, or pipelines.

- I. The proposed access road for this well location is located on B.L.M. lands and is contained within the lease boundaries. The existing access road is located on B.L.M. and FEE lands as shown on the attached topo map "B". We are hereby requesting right-of-way for that portion of access road which is on B.L.M. lands and are off lease.

3. Location of Existing Wells:

None

4. Location of Existing and/or Proposed Facilities:

- A. All Petroleum Production Facilities are to be contained within the proposed location sites.
- B. In the event that production of these wells is established, the following will be shown:
 - 1. Proposed location and attendant lines, by flagging, if off well pad.
 - 2. Dimensions of facilities.
 - 3. Construction methods and materials.

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- C. The area used to contain the proposed production facilities will be built using native materials. If these materials are not acceptable, then other arrangements will be made to acquire them from private sources. These facilities will be constructed using bulldozers, graders, and workman crews to construct and place the proposed facilities.
- D. All permanent facilities placed on the locations shall be painted a non-reflective color which will blend with the natural environment.
- E. A dike shall be constructed around the tank battery, of sufficient capacity to adequately contain at least 110 percent of the storage capacity of the largest tank within the dike.
- F. All buried pipelines shall be covered to a depth of 3 feet except at road crossings where they shall be covered to a depth of 4 feet.
- G. Construction width of the right-of way/pipeline route shall be restricted to 30 feet of disturbance.
- H. Pipeline location warning signs shall be installed within 90 days upon completion of construction.

5. Location and Type of Water Supply:

The water source for this well will be from the Cottonwood Creek Consolidated Irrigation Co. The water user claim number is 93-2185 and the two (2) points of diversion will be from the Clipper Canal or the Western Canal which ever is the most accessible. This water will be hauled by a local trucking company..

No water wells are to be drilled.

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Ferron Federal #14-10-18-8

6. Source of Construction Materials:

A. No construction materials are needed for drilling operations. In the event of production, the small amount of gravel needed for facilities will be hauled in by truck from a local gravel pit over existing access roads from the area. No special access other than for drilling operations and pipeline construction is needed.

B. All access roads crossing B.L.M. Land are described under item #2 and shown on Map #B.

All Construction material for these location sites and access roads shall be borrow material accumulated during the construction of the location sites and access roads. No additional construction material from other sources is anticipated at this time, but if it is required, the appropriate actions will be taken to acquire it from private sources.

C. All well pad surface disturbance area is on B.L.M. lands

7. Methods for Handling Waste Disposal:

A. Drill cuttings will be buried in the reserve pit when covered.

B. Drilling fluids will be contained in the reserve pit.

C. Any hydrocarbon liquids produced while production testing will be contained in a test tank. Any unavoidable spills of oil or other adverse substances or materials will be removed immediately during drilling progress or during completion operations.

D. Portable chemical toilets will be provided and serviced by a local commercial sanitary service.

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Ferron Federal #14-10-18-8

- E. Garbage and trash will be collected in a trash cage and its contents hauled to a sanitary landfill.

All wastes caused by the construction activities shall be promptly removed and disposed of in a sanitary landfill or as directed by the authorized officer.

- F. Prior to commencement of drilling, the reserve pit will be fenced on three sides using 39-inch net wire with at least one (1) strand of barbed wire. All wire is to be stretched before attaching to corner posts. When drilling activities are completed it will be fenced on the fourth side and allowed to dry (if liquids are present). After drying, the fences will be removed and the pit shall be buried. Reclamation will be undertaken no later than the fall of the year after all drilling activity has ceased.

8. Ancillary Facilities:

No air strips, camps, or other living facilities will be built off the location. Housing and office trailers will be on the location as seen on the location layout.

9. Well Site Layout:

- A. See attached cutsheet.
- B. The areas authorized officer will be contacted at least 24 hours prior to commencing construction of the access road and well pad.
- C. The authorized officer will determine after the location is constructed whether the pit is to be lined, and if so, the type of material to be used.
- D. Topsoil shall be stripped to a depth of 4 to 6 inches and stockpiled as shown on the location layout plat.
- E. The backslopes of the locations will be no steeper than vertical or 1/4:1 in rock, and 2:1 elsewhere.

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Ferron Federal #14-10-18-8

- F. The upper edges of all cut banks on the access roads and well pads will be rounded.
- G. Catchment ponds to be placed as required to intercept drainage re-routes.

10. Plans for Restoration:

- A. Immediately upon completion, the location and surrounding area will be cleared of all debris, materials, trash and junk not required for production.
- B. Before any dirt work to restore the location takes place, the reserve pit must be completely dry. The reserve pit will be reclaimed within 90 days from the date of well completion.
- C. The area officer shall be notified at least 48 hours prior to commencing reclamation work.
- D. All disturbed areas will be seeded with the a mixture which is found suitable by the B.L.M.
- E. The seed bed will be prepared by disking, following the natural contour. Drill seed on contour at a depth no greater than 1/2 inch. In areas that cannot be drilled, the seed will be broadcast at double the seeding rate and harrowed into soil. Certified seed is recommended.
- F. Fall seeding will be completed after September, and prior to prolonged ground frost.

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Ferron Federal #14-10-18-8

- G. If the well is a producer, access roads will be upgraded and maintained as necessary to prevent soil erosion, and accommodate year round traffic. Areas unnecessary to operations will be reshaped, topsoil distributed, and seed distributed according to the above mixtures. Perennial vegetation must be established. Additional work shall be required in case of seeding failures, etc.
- H. If the well is abandoned or is a dry hole, the access road and location will be restored to approximate the original contours. During reclamation of the site the fill material will be pushed into cuts and up over the backslope. No depressions will be left that would trap water or form ponds. Topsoil will be distributed evenly over the location and seeded according to the above mixture. The access road and the location shall be ripped or disked prior to seeding. Perennial vegetation must be established. Additional work shall be required in case of seeding failures, etc.
- I. Annual or noxious weeds shall be controlled on all disturbed areas. Method of control shall be by an approved mechanical method or an Environmental Protection Agency (EPA) registered herbicide. All herbicide application proposals must be approved. Application of herbicides must be under direct field supervision of an EPA certified pesticide applicator.

11. Other Information:

- A. The area is used by man for the primary purpose of grazing domestic livestock.

All activity shall cease when soils or road surfaces become saturated to a depth of three inches, unless otherwise approved by the Authorized Officer.

If any fossils are discovered during construction, the operator shall cease construction immediately and notify the Authorized Officer so as to determine the significance of the discovery.

- B. A Class III cultural resource inventory has been completed prior to disturbance by a qualified professional Archaeologist.

Chandler & Associates, Inc.
Ferron Federal #14-10-18-8

- C. The B.L.M. considers the development of groundwater resources to be necessary and frequently indispensable to effective land management. Therefore, any groundwater intercepted by the party conducting mineral exploration shall be reported to the authorized officer immediately including approximate quantities and a sample in a sealed quart container. The B.L.M. shall have the first opportunity to file State water rights for the intercepted groundwater. The undersigned may file for water rights only with a written waiver from the State.
- D. The operator is responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, the operator is to immediately stop work that might further disturb such materials and contact the authorized officer (AO). Within five working days the AO will inform the operator as to:
- whether the materials appear eligible for the National Register of Historic Places;
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary); and a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

Chandler & Associates, Inc.
Ferron Federal #14-10-18-8

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation costs. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, an operator will then be allowed to resume construction.

- E. Less than 10,000 pounds of any chemical(s) from EPA's Consolidated list of Chemicals Subject to Reporting Under Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986, and less than threshold planning quantity (TPQ) of any extremely hazardous substances(s), as defined in 40 CFR, would be used, produced, transported, stored, disposed, or associated with the proposed action.

12. Lessee's or Operator's Representative:

Mr. Don Johnson
Manager Operations/Production
Chandler & Associates, Inc.
475 Seventeenth Street
Suite 1000
Denver, Colorado 80202
Telephone #(303) 295-0400

Chandler & Associates, Inc.
Ferron Federal #14-10-18-8

13. Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite(s) and access route(s); that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by **Chandler & Associates, Inc.**, and its contractors and subcontractors in conformity with the plan and the terms and conditions under which it is approved.

This statement is subject to the provision of 18 U.S.C. 1001 for the filing of a false statement.

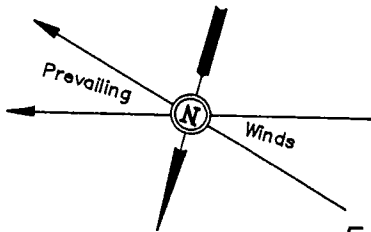
8-30-95
Date

Robert L. Kay
Robert L. Kay
Agent

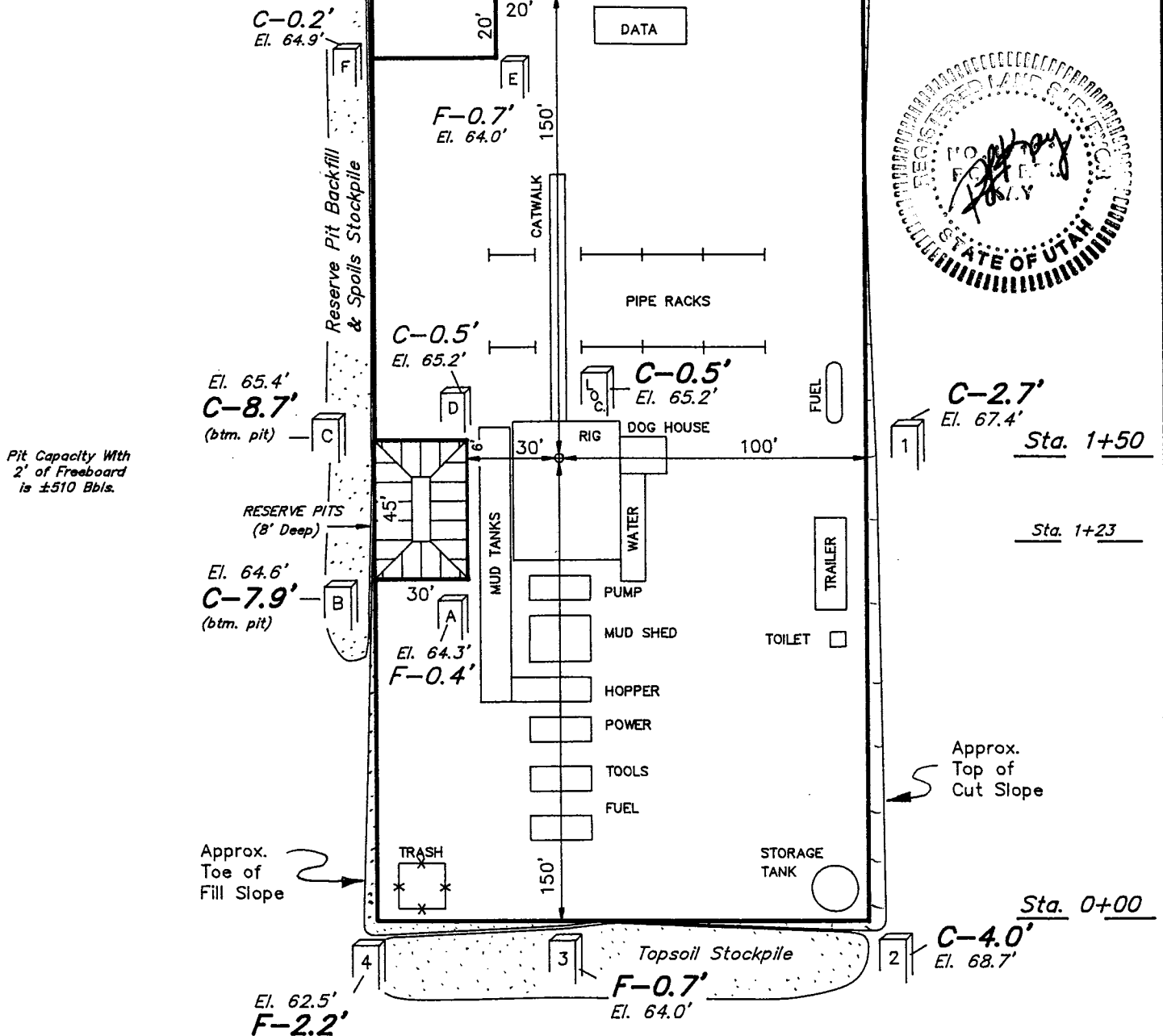
CHANDLER & ASSOCIATES, INC.

LOCATION LAYOUT FOR

FERRON FEDERAL #14-10-18-8
SECTION 10, T18S, R8E, S.L.B.&M.
589' FSL 1856' FWL



SCALE: 1" = 50'
DATE: 8-29-95
Drawn By: D.R.B.



Elev. Ungraded Ground at Location Stake = 5865.2'

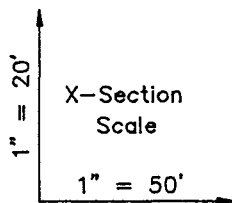
Elev. Graded Ground at Location Stake = 5864.7

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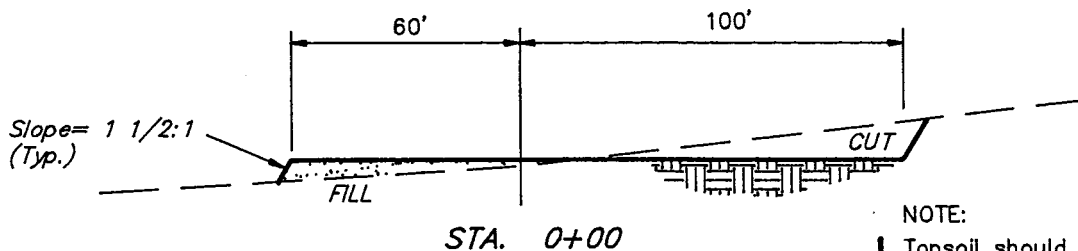
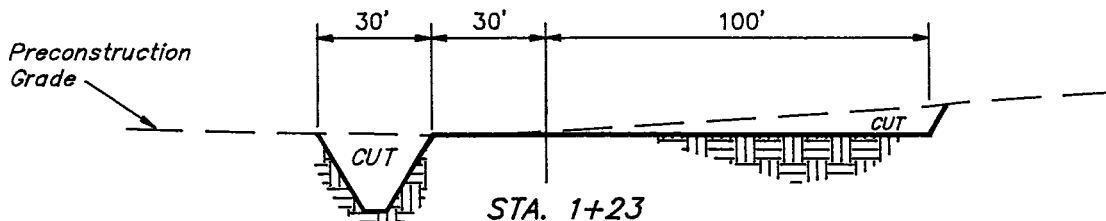
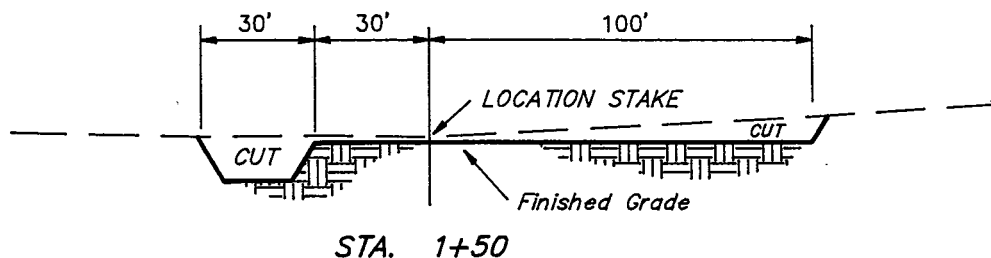
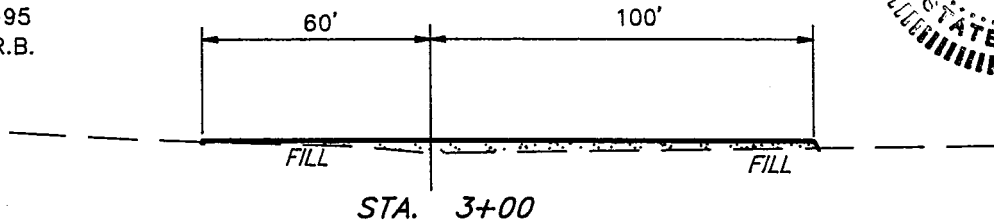
CHANDLER & ASSOCIATES, INC.

TYPICAL CROSS SECTIONS FOR

FERRON FEDERAL #14-10-18-8
SECTION 10, T18S, R8E, S.L.B.&M.
589' FSL 1856' FWL



DATE: 8-29-95
Drawn By: D.R.B.



NOTE:
Topsoil should not be
Stripped Below Finished
Grade on Substructure Area.

APPROXIMATE YARDAGES

(6") Topsoil Stripping = 1,020 Cu. Yds.

Remaining Location = 1,150 Cu. Yds.

TOTAL CUT = 2,170 CU.YDS.

FILL = 790 CU.YDS.

EXCESS MATERIAL AFTER
5% COMPACTION = 1,340 Cu. Yds.

Topsoil & Pit Backfill
(1/2 Pit Vol.) = 1,110 Cu. Yds.

EXCESS UNBALANCE
(After Rehabilitation) = 230 Cu. Yds.

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SCALE: 1" = 2000'

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 09/01/95

API NO. ASSIGNED: 43-015-30267

WELL NAME: FERRON FEDERAL 14-10-18-8
OPERATOR: CHANDLER & ASSOCIATES (N3320)

PROPOSED LOCATION:

SESW 10 - T18S - R08E
SURFACE: 0589-FSL-1856-FWL
BOTTOM: 0589-FSL-1856-FWL
EMERY COUNTY
WILDCAT FIELD (001)

LEASE TYPE: FED
LEASE NUMBER: UTU - 69403

PROPOSED PRODUCING FORMATION: FRSD

INSPECT LOCATION BY: / /

TECH REVIEW	Initials	Date
Engineering		
Geology		
Surface		

RECEIVED AND/OR REVIEWED:

☐ Plat
☐ Bond: Federal[] State[] Fee[]
 (Number _____)
☐ Potash (Y/N)
☐ Oil shale (Y/N)
☐ Water permit
 (Number _____)
☐ RDCC Review (Y/N)
 (Date: _____)

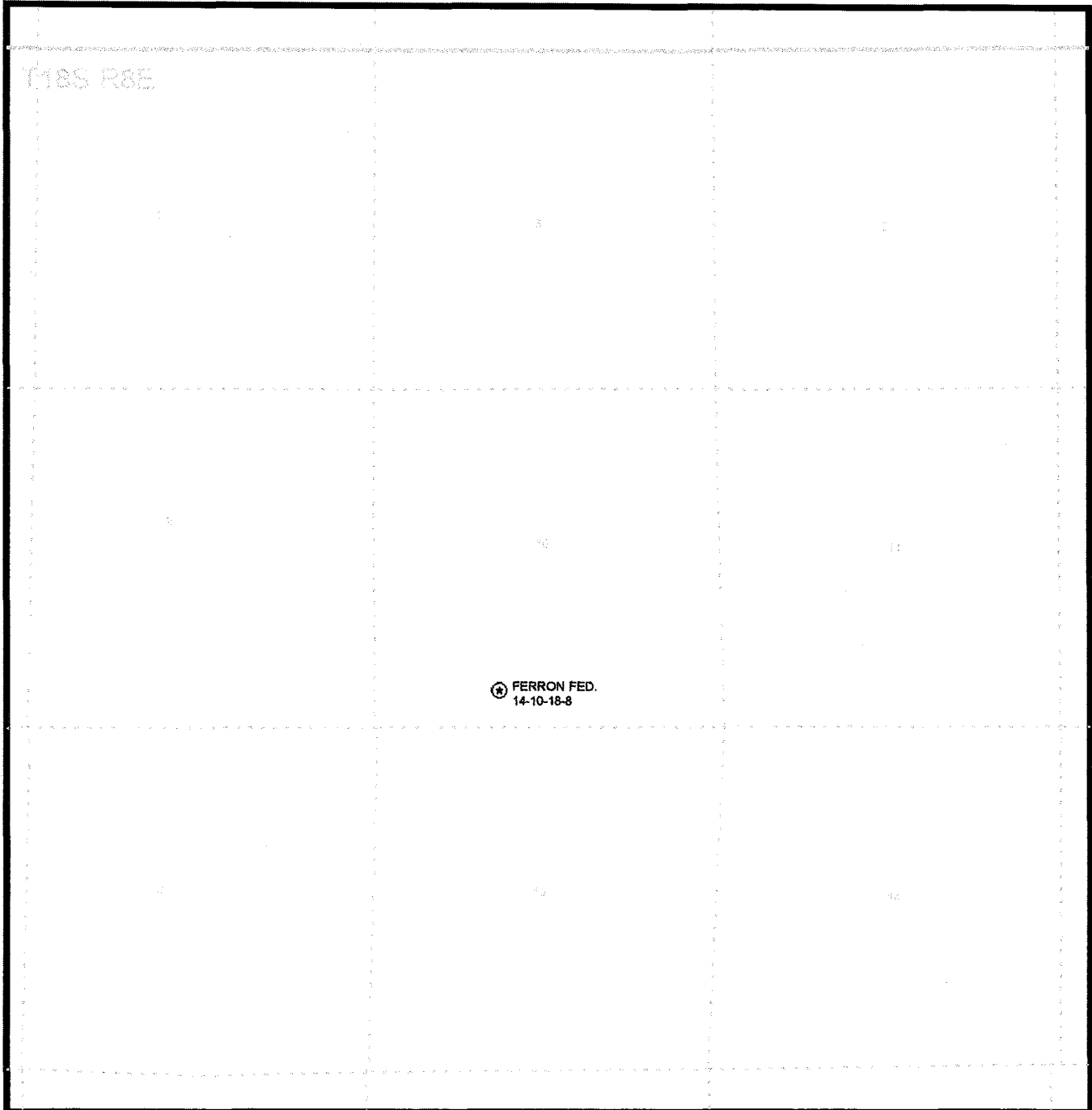
LOCATION AND SITING:

☐ R649-2-3. Unit: _____
☒ R649-3-2. General.
☐ R649-3-3. Exception.
☐ Drilling Unit.
 Board Cause no: _____
 Date: _____

COMMENTS: _____

STIPULATIONS: _____

OPERATOR: CHANDLER & ASSOCIATES
FIELD: WILDCAT
SEC, TWP, RNG: 10, T18S, R8E
COUNTY: EMERY
UAC: R649-3-2



PREPARED:
DATE: 3-OCT-96

STATE OF UTAH, DIV OF OIL, GAS & MINERALS

Operator: CHANDLER & ASSOCIATES	Well Name: FERRON FED 14-10-18-
Project ID: 43-015-30267	Location: SEC. 10 - T18S - R8E

Design Parameters:

Mud weight (8.80 ppg) : 0.457 psi/ft
 Shut in surface pressure : 952 psi
 Internal gradient (burst) : 0.025 psi/ft
 Annular gradient (burst) : 0.000 psi/ft
 Tensile load is determined using air weight
 Service rating is "Sweet"

Design Factors:

Collapse : 1.125
 Burst : 1.00
 8 Round : 1.80 (J)
 Buttress : 1.60 (J)
 Other : 1.50 (J)
 Body Yield : 1.50 (B)

Length (feet)		Size (in.)	Weight (lb/ft)	Grade	Joint	Depth (feet)	Drift (in.)	Cost	
1	2,200	5.500	15.50	J-55	ST&C	2,200	4.825		
	Collapse Load Strgth S.F. (psi) (psi)			Burst Load (psi)	Min Int Strgth (psi)	Yield S.F.	Tension Load Strgth (kips) (kips)		S.F.
1	1006	4040	4.016	1006	4810	4.78	34.10	202	5.92 J

Prepared by : MATTHEWS, Salt Lake City, Utah
 Date : 10-03-1996
 Remarks :

FERRON SANDSTONE

Minimum segment length for the 2,200 foot well is 1,500 feet.

SICP is based on the ideal gas law, a gas gravity of 0.69, and a mean gas temperature of 89°F (Surface 74°F , BHT 105°F & temp. gradient 1.400°/100 ft.)

String type: Production

The mud gradient and bottom hole pressures (for burst) are 0.457 psi/ft and 1,006 psi, respectively.

NOTE: The design factors used in this casing string design are as shown above. As a general guideline, Lone Star Steel recommends using minimum design factors of 1.125 - collapse (with evacuated casing), 1.0 - (uniaxial) burst, 1.8 - API 8rd tension, 1.6 - buttress tension, 1.5 - body yield tension, and 1.6 - EUE 8rd tension. Collapse strength under axial tension was calculated based on the Westcott, Dunlop and Kemler curve. Engineering responsibility for use of this design will be that of the purchaser.
 Costs for this design are based on a 1987 pricing model. (Version 1.07)



State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt
Governor

Ted Stewart
Executive Director

James W. Carter
Division Director

1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801

October 3, 1996

Chandler & Associates, Inc.
475 Seventeenth Street, Suite 1000
Denver, Colorado 80202

Re: Ferron Federal 14-10-18-8 Well, 589' FSL, 1856' FWL, SE SW,
Sec. 10, T. 18 S., R. 8 E., Emery County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. 40-6-1 et seq., Utah Administrative Code R649-3-1 et seq., and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-015-30267.

Sincerely,

R. J. Firth
for R. J. Firth
Associate Director

lwp

Enclosures

cc: Emery County Assessor
Bureau of Land Management, Moab District Office

Operator: Chandler & Associates, Inc.
Well Name & Number: Ferron Federal 14-10-18-8
API Number: 43-015-30267
Lease: UTU-69403
Location: SE SW Sec. 10 T. 18 S. R. 8 E.

Conditions of Approval

1. General

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for Permit to Drill.

2. Notification Requirements

Notify the Division within 24 hours following spudding the well or commencing drilling operations. Contact Jimmie Thompson at (801)538-5336.

Notify the Division prior to commencing operations to plug and abandon the well. Contact Frank Matthews at (801)538-5334 or Mike Hebertson at (801)538-5333.

3. Reporting Requirements

All required reports, forms and submittals shall be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

CONFIDENTIAL

Form 3160-3
(December 1990)

SUBMIT IN TRIPLICATE*
(Other instructions on
reverse side)

Form approved.
Budget Bureau No. 1004-0136
Expires: December 31, 1991

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

b. TYPE OF WELL

OIL
WELL ☐

GAS
WELL ☒

OTHER

SINGLE
ZONE ☐

MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Chandler & Associates, Inc.

3. ADDRESS AND TELEPHONE NO.

303-295-0400

475 Seventeenth St., Suite 1000 Denver, CO 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)

At surface

589' FSL 1856' FWL (SE 1/4 SW 1/4)

At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

See Topo Map "A" (attached)

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any)

875'

16. NO. OF ACRES IN LEASE

960 1561 1561 1561 1561

17. NO. OF ACRES ASSIGNED
TO THIS WELL

160

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

19. PROPOSED DEPTH

2200'

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

5865' GR

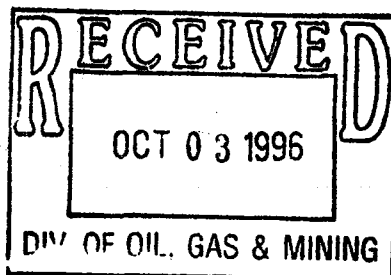
22. APPROX. DATE WORK WILL START*

A.S.A.P.

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
--------------	-----------------------	-----------------	---------------	--------------------



CONDITIONS OF APPROVAL ATTACHED

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED

Robert L. Kay

TITLE Agent for Chandler

DATE 8-30-95

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:

Associate District Manager

SEP 25 1996

APPROVED BY

151 Bradd. Palmer

TITLE

DATE

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

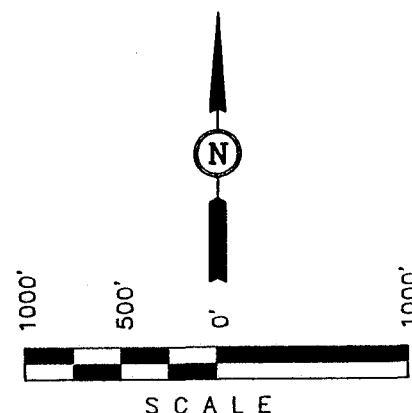
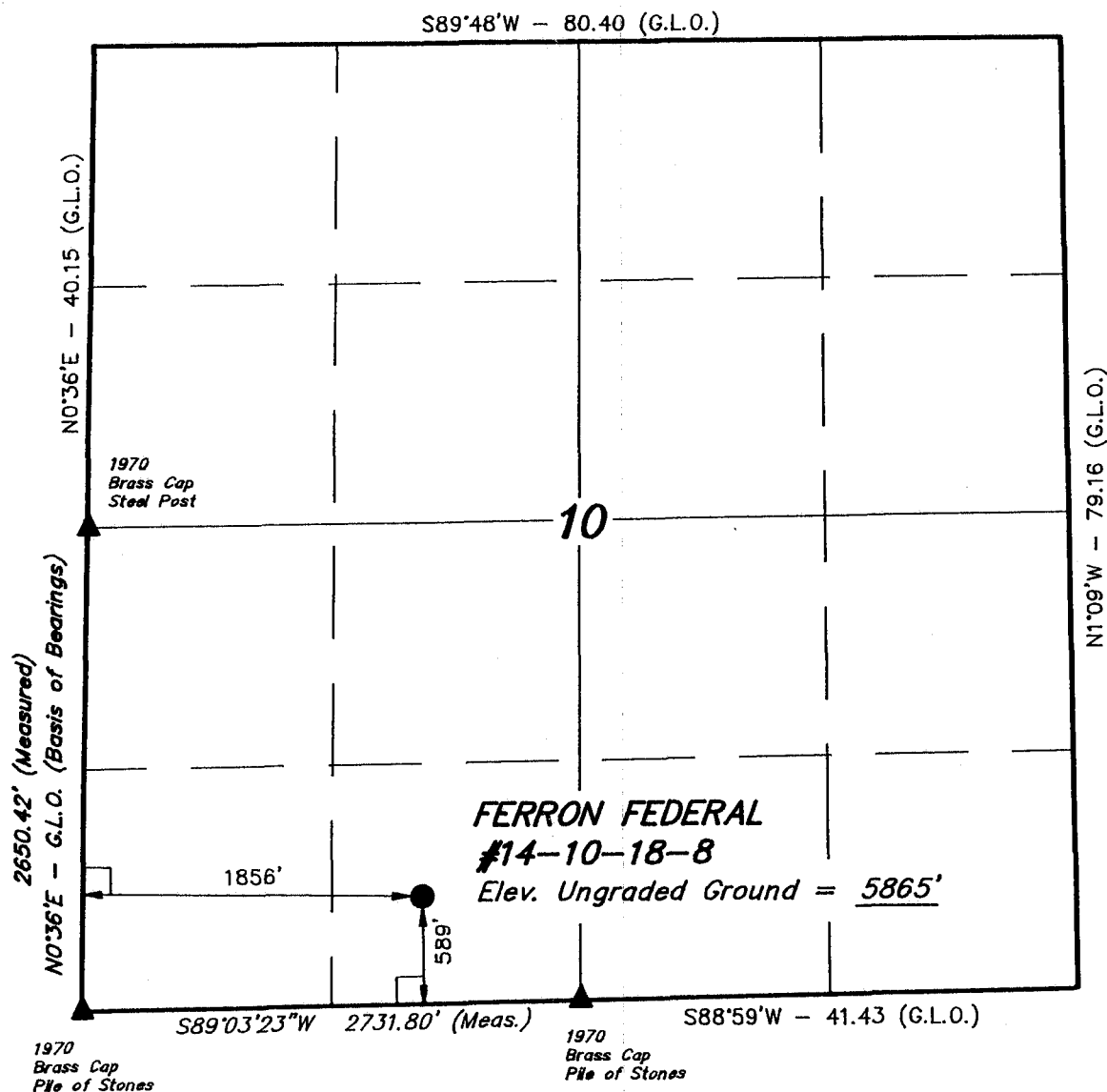
T18S, R8E, S.L.B.&M.

CHANDLER & ASSOCIATES, INC.

Well location, FERRON FEDERAL #14-10-18-8, located as shown in the SE 1/4 SW 1/4 of Section 10, T18S, R8E, S.L.B.&M. Emery County, Utah.

BASIS OF ELEVATION

SPOT ELEVATION AT THE SOUTHWEST CORNER OF SECTION 9, T18S, R8E, S.L.B.&M. TAKEN FROM THE RED POINT QUADRANGLE, UTAH, EMERY COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 6160 FEET.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

L. Kay
REGISTERED LAND SURVEYOR
REGISTRATION NO. 161319
STATE OF UTAH

UTAH ENGINEERING & LAND SURVEYING
85 SOUTH 200 EAST - VERNAL, UTAH 84078
(801) 789-1017

LEGEND:

- = 90° SYMBOL
- = PROPOSED WELL HEAD.
- = SECTION CORNERS LOCATED.

SCALE 1" = 1000'	DATE SURVEYED: 8-4-95	DATE DRAWN: 8-29-95
PARTY D.A. C.G. D.R.B.	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE CHANDLER & ASSOCIATES, INC.	

Chandler & Associates, Inc.
Ferron Federal #14-10-18-8
U-72468
Ferron
589 FSL 1856 FWL
SESW Section 10, T. 18 S., R. 8 E.
Emery County, Utah

CONDITIONS OF APPROVAL

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Be advised that Chandler & Associates, Inc. is considered to be the operator of the above well and is responsible under the terms and conditions of the lease for the operations conducted on the leased lands.

Bond coverage for this well is provided by UT-0969 (Principal-Chandler & Associates, Inc.) via surety consent as provided for in 43 CFR 3104.2.

This office will hold the aforementioned operator and bond liable until the provisions of 43 CFR 3106.7-2 continuing responsibility are met.

This permit will be valid for a period of one year from the date of approval. After permit termination, a new application must be filed for approval.

All lease operations shall be conducted in full compliance with applicable regulations (43 CFR 3100), Onshore Oil and Gas Orders, lease terms, notices to lessees, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions and the approved plan will be made available to field representatives to insure compliance.

A. DRILLING PROGRAM

1. The BOP system shall be rated to 2M as proposed. Installation, testing and operation of the system shall be in conformance with Onshore Oil and Gas Order No. 2.
2. The proposal indicated that a double gate or single gate BOP would be used. Per Onshore Oil and Gas Order No. 2, a single gate BOP is not acceptable unless used in conjunction with another single gate or an annular BOP. A double gate ram, as depicted in your BOP schematic, is acceptable (OOGO #2 III A.2.a.ii).
3. The application indicated that a rotating head would not be used. Use of a rotating head is mandatory for air drilling (OOGO #2 III E.1.).
4. The application indicated that no float would be used at the bit. During air drilling operations, a float valve must be in place above the bit (OOGO #2 III E.1.).
5. The choke manifold diagram does not depict a pressure gauge in the system. The manifold must include a pressure gauge with a valve capable of isolating the gauge from the system (OOGO #2 III A.2.a.ii.).
6. **Any fluid bearing or lost circulation zones encountered during drilling shall be protected behind casing and cement.**
7. If a gas meter run is constructed, it will be located on lease within 500 feet of the wellhead. The gas flowline will be buried from the wellhead to the meter and will be buried downstream of the meter until it leaves the pad. Meter runs will be housed and/or fenced. The gas meter shall be calibrated prior to first sales and shall be calibrated quarterly thereafter. All gas production and measurement shall comply with the provisions of 43 CFR § 3162.7-3, Onshore Oil and Gas Order No. 5, and American Gas Association (AGA) Report No. 3.

B. SURFACE USE PLAN

1. An on-site inspector is to be provided by the operator during construction of all roads and drill pad sites to ensure compliance with all requirements and stipulations. The inspector will be designated at the pre-drill conference, and is to be given an approved copy of all maps, permits and stipulations before the start of construction. The BLM will also designate a representative for the project at the pre-drill conference.
2. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the permittee, or any person working on his behalf, on public or Federal land is to be immediately reported to the authorized officer. The operator will suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The operator is responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the BLM.

ROAD BUILDING AND MAINTENANCE PROCEDURES

3. Road construction or routine maintenance activities are to be performed during periods when the soil can adequately support construction equipment. If such equipment creates ruts more than 6 inches deep, the soil is deemed too wet to adequately support construction equipment. Earthwork operations are to be completed when the soil is not frozen.
4. Generally Class III road building and maintenance standards are to be used in the upgrading, use and maintenance of new roads authorized under the permit or right-of-way. No upgrading beyond the existing disturbed area is authorized in most cases for existing roads. If determined necessary by the authorized officer the roads may be upgraded to meet the standards for (Class II) (Class III) roads. The BLM may request that a higher road standard be utilized. This will be considered if due to poor drainage or other inherent problems with the current design of the road, damage to the public lands is occurring incidental to such road use.
5. The operator is responsible for maintenance of all roads authorized through the lease or a right-of-way. Class III (Resource) Road Standards as described in BLM Manual Section 9113 and the Moab District Road Standards are to be used. Maintenance may include but is not limited to grading, applying gravel, snow removal, ditch cleaning, or other construction and maintenance requirements as directed by the authorized officer.

6. Suitable topsoil material is to be removed with clearing and stripping. This material is to be conserved in stockpiles within the pad. Topsoil is to be stripped and salvaged to an average depth of 2 - 6 inches, during the construction of all new roads and pads. Topsoil depth will be decided onsite by the BLM. If areas are left disturbed for a period over one (1) year, topsoil stockpiles are to be seeded with a mixture prescribed by the authorized officer.

GENERAL CONSTRUCTION PROCEDURES

7. Topsoil from access roads is to be wind rowed along the uphill side of the road. When the well is plugged and the road rehabilitated, this soil will then be used as a top coating for the seed bed.
8. Within six (6) months of installation all onsite facilities are to be painted a flat non-reflective color matching the standard environmental colors as determined by the Rocky Mountain Five State Interagency Committee (Extreme weather conditions may warrant an extension). Facilities required to be painted to comply with OSHA requirements are exempt from this requirement.
9. Generally, drill pads are to be designed to prevent overland flow of water from entering the site. The pad is to be sloped to drain spills and water into the reserve pit.

REHABILITATION PROCEDURES

Site Preparation

10. The entire roadbed and drill site should be obliterated and brought back to the approximate original contour. Drainage control is to be reestablished as necessary. All areas affected by road construction are to be recontoured to blend in with the existing topography. All berms are to be removed. In recontouring the disturbed areas, care should be taken to not disturb additional vegetation.

11. Erosion-control structures such as water bars, diversion channels, and terraces will be constructed to divert water and reduce soil erosion on the disturbed area. Water bars shall be spaced on road grades greater than 4 percent (i.e., 4 to 8 percent grade on 200-foot intervals and greater than 8 percent on 100-foot intervals). In addition, water bars should be installed at all alignment changes (curves), significant grade changes, and as determined by a qualified engineer. Water bars should be sloped with the grade and cut to a minimum 12-inch depth below the surface. The grade of the water bar should be 2 percent greater than the grade of the road.

Seedbed Preparation

12. An adequate seedbed should be prepared for all sites to be seeded. Areas to be revegetated should be chiselled or disked to a depth of at least 12 inches unless restrained by bedrock.
13. Ripping of fill materials should be completed by a bulldozer equipped with single or a twin set of ripper shanks. Ripping should be done on 4-foot centers to a depth of 12 inches or as directed by the authorized officer. Ripping should be followed by final grading and precede seedbed material application. Ripping should be completed at a speed that maximizes ripper shank action and promotes soil material disruption to the specified depth. Ripping should be repeated until the compacted area is loose and friable.
14. Seedbed preparation will be considered complete when the soil surface is completely roughened and the number of rocks (if present) on the site is sufficient to cause the site to match the surrounding terrain.

Fertilization

15. The soil on all sites to be reseeded is to be tested for electrical conductivity, SAR (Sodium Absorption Ratio) nitrogen, phosphorous and DTPA micronutrients (Fe, Zn, Cu, Mg, Ca, Cr, Ni). Soil is to be tested at a certified soil lab and results are to be provided to BLM. If soil tests results determine the need, commercial fertilizer shall be applied. The authorized officer of the BLM will make the determination if fertilizer is to be applied.

Commercial fertilizer with a formula of 16-16-8 is to be applied at a rate of 200 pounds per acre to the site as directed by the authorized officer. The rate may be adjusted depending on soil test results.

16. Fertilizer is to be applied not more than 48 hours before seeding and cultivated into the upper 3 inches of soil.

17. Fertilizer is to be broadcast over the soil using hand-operated "cyclone-type" seeders or rotary broadcast equipment attached to construction or revegetation machinery as appropriate to slope. All equipment should be equipped with a metering device. Fertilizer application is to take place before the final seeding. preparation treatment. Fertilizer broadcasting operations should not be conducted when wind velocities would interfere with even distribution of the material.

Mulching

18. Mulching is to be conducted as directed by the authorized officer.

The type of mulch should meet the following requirements:

Wood cellulose fiber shall be natural or cooked, shall disperse readily in water, and shall be nontoxic. Mulch shall be thermally produced and air dried. The homogeneous slurry or mixture shall be capable of application with power spray equipment. A colored dye that is noninjurious to plant growth may be used when specified. Wood cellulose fiber is to be packaged in new, labeled containers. A minimum application of 1500 pounds per acre shall be applied. A suitable tackifier shall be applied with the mulch at a rate of 60 to 80 pounds per acre.

An alternative method of mulching on small sites would be the application of straw or hay mulch at a rate of 2000 pounds per acre. Hay or straw shall be certified weed free. Following the application of straw or hay, crimping shall occur to ensure retention.

Reseeding:

19. All disturbed areas are to be seeded with the seed mixture required by the BLM. The seed mixture(s) shall be planted in the fall of the year (Sept-Nov), in the amounts specified in pounds of pure live seed (PLS)/acre. There shall be no primary or secondary noxious weed seed in the seed mixture. Seed will be tested and the viability testing of seed shall be done in accordance with State law(s) and within 12 months before purchase. Commercial seed will be either certified or registered seed. The seed mixture container shall be tagged in accordance with State law(s) and available for

inspection by the authorized officer. Seed is to be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture shall be evenly and uniformly planted over the disturbed area. (Smaller/heavier seeds tend to drop to the bottom of the drill and are planted first. Appropriate measures should be taken to ensure this does not occur.) Where drilling is not possible, seed is to be broadcast and the area raked or chained to cover the seed. Woody species with seeds that are too large for the drill will be broadcast. When broadcasting the seed, the pounds per acre noted below are to be increased by 50 percent. Reseeding may be required if a satisfactory stand is not established to the surface rights owner's specifications. Evaluation of the seeding's success will not be made before completion of the second growing season after the vegetation becomes established. The Authorized Officer is to be notified a minimum of seven (7) days before seeding of a project.

The seed mixture shall be made up of the following species and amounts:

<u>Common name</u>	<u>Latin</u>	<u>Amount (lbs/ac/*PLS)</u>
Galleta	<i>Hilaria jamesii</i>	2
Indian Ricegrass	<i>Oryzopsis hymenoides</i>	2
Forage kochia	<i>Kochia prostrata</i>	2
Fourwing saltbush	<i>Atriplex canescens</i>	2
Shadscale	<i>Atriplex confertifolia</i>	2
Globemallow, scarlet	<i>Sphaeralcea coccinea</i>	1
Small burnet	<i>Sanguisorba minor</i>	1
Yellow Sweetclover	<i>Melilotus officinalis</i>	+ 1
Total:		11.0

Substitute species may be used if prior approval from the BLM is obtained.

Pure Live Seed (PLS) formula: % of purity of seed mixture times % germination of seed mixture = portion of seed mixture that is PLS.

20. The disturbed areas for the drill site and road must be seeded with the following seed mix immediately after the topsoil is replaced:

HYDROLOGY PROCEDURES

21. Reserve pits and disposal ponds are to be constructed to contain contaminated and/or produced water on site. One foot of freeboard is to be maintained in disposal ponds to contain precipitation without overflow.
22. For wells completed in the Ferron or Navajo formations, the potentiometric surface (well bore fluid level) of the respective formations is to be recorded. This is to be completed before pumping and submitted to BLM with the Completion Report and Log form (form 3160-4)

23. All hydrologic modifications should be made according to the "State of Utah Nonpoint Source Management Plan for Hydrologic Modifications - March 1995," where feasible.

C. REQUIRED APPROVALS, REPORTS AND NOTIFICATIONS

Required verbal notifications are summarized in Table 1, attached.

Building Location- Contact the Price BLM Office, Mike Kaminski, at least 48 hours prior to commencing construction of location.

Spud- The spud date will be reported to the Price BLM Office, 24 hours prior to spudding. Written notification in the form of a Sundry Notice (Form 3160-5) will be submitted to the Moab District Office within 24 hours after spudding, regardless of whether spud was made with a dry hole digger or big rig.

Daily Drilling Reports- Daily drilling reports shall detail the progress and status of the well and shall be submitted to the Moab District Office on a weekly basis.

Monthly Reports of Operations- In accordance with Onshore Oil and Gas Order No. 1, this well shall be reported on Minerals Management Service (MMS) Form 3160, "Monthly Report of Operations," starting the month in which operations commence and continuing each month until the well is physically plugged and abandoned. This report will be filed directly with MMS.

Sundry Notices- There will be no deviation from the proposed drilling and/or workover program without prior approval from the Moab District Office. "Sundry Notices and Reports on Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR § 3162.3-2. Safe drilling and operating practices must be observed.

Drilling Suspensions- Operations authorized by this permit shall not be suspended for more than 30 days without prior approval of the Moab District Office. All conditions of this approval shall be applicable during any operations conducted with a replacement rig.

Undesirable Events- Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be immediately reported to the Price BLM Office, in accordance with requirements of NTL-3A.

Cultural Resources- If cultural resources are discovered during construction, work that might disturb the resources is to stop, and the Price BLM Office is to be immediately notified.

First Production- Should the well be successfully completed for production, the Moab District Office will be notified when the well is placed in producing status. Such notification may be made by phone, but must be followed by a sundry notice or letter not later than five (5) business days following the date on which the well is placed into production.

A first production conference will be scheduled as soon as the

productivity of the well is apparent. This conference should be coordinated through the Price BLM Office. The Price BLM Office shall be notified prior to the first sale.

Well Completion Report- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted to the Moab District Office not later than thirty (30) days after completion of the well or after completion of operations being performed, in accordance with 43 CFR § 3162.4-1. Two copies of all logs, core descriptions, core analyses, well test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. When requested, samples (cuttings and/or samples) will be submitted to the Moab District Office.

Venting/Flaring of Gas- Gas produced from this well may not be vented/flared beyond an initial, authorized test period of 30 days or 50 MMcf, whichever first occurs, without the prior, written approval of the Moab District Office. Should gas be vented or flared without approval beyond the authorized test period, the well may be ordered shut-in until the gas can be captured or approval to continue the venting/flaring as uneconomic is granted. In such case, compensation to the lessor shall be required for that portion of the gas that is vented/flared without approval and which is determined to have been avoidably lost.

Produced Water- Provisions must be made to dispose of produced water into tanks, trucks, or other similar equipment. Waste water may not be confined to an unlined pit.

Off-Lease Measurement, Storage, Commingling- Prior approval must be obtained from the Moab District Office for off-lease measurement, off-lease storage and/or commingling (either down-hole or at the surface).

Plugging and Abandonment- If the well is completed as a dry hole, plugging instructions must be obtained from the Moab District Office prior to initiating plugging operations.

A "Subsequent Report of Abandonment" (Form 3160-5) must be filed with the Moab District Office within thirty (30) days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration. Upon completion of approved plugging, a regulation marker will be erected in accordance with 43 CFR § 3162.6. Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the Area Manager or his representative, or the appropriate surface managing agency.

TABLE 1. NOTIFICATIONS

Notify Mike Kaminski of the Price BLM Office at (801) 636-3600 or (801) 637-2518 for the following:

2 days prior to commencement of dirt work, construction and reclamation;

1 day prior to spudding;

50 feet prior to reaching surface casing depth;

3 hours prior to testing BOPE

If the above cannot be reached, notify the Moab District Office at (801) 259-6111. If unsuccessful, notify the person listed below.

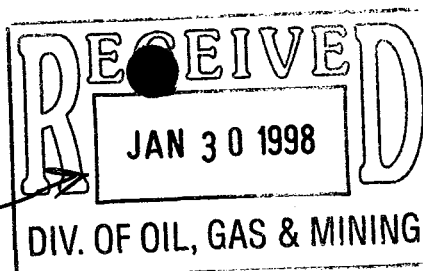
Well abandonment operations require 24 hour advance notice and prior approval. In the case of newly drilled dry holes, verbal approval can be obtained by calling the Moab District Office, Branch of Fluid Minerals at (801) 259-6111. If approval is needed after work hours, you may contact the following:

Eric Jones, Petroleum Engineer	Office:	(801) 259-6111
	Home:	(801) 259-2214

Gary Torres, Petroleum Engineer	Office:	(801) 259-6111
	Home:	(801) 587-2705

2/4/98

DOG M
LA DATE



Moab District Office
82 East Dogwood
Moab, Utah 84532

3162
(UTU72468)
(UT-065)

Chandler & Associates, Inc.
475 Seventeenth Street, Suite 1000
Denver, Colorado 80202

Re: Rescinding Application for Permit to Drill
Well No. Ferron Federal 14-10-18-8
SESW Sec. 10, T. 18 S., R. 8 E.
Emery County, Utah
Lease UTU72468

JAN 28 1998

43-015-30267

Gentlemen:

The Application for Permit to Drill the referenced well was approved on September 25, 1996. Since that date, no known activity has transpired at the above location. APD's are effective for a period of one year. In view of the foregoing, this office is rescinding the approval. Should you intend to drill this location at a future date, a new application for permit to drill must be submitted.

If you have any concerns and/or questions, please contact Verlene Butts, Legal Instruments Examiner at (435) 259-2152.

Sincerely,

/s/ Brad D Palmer

Assistant District Manager
Resource Management

Enclosure
Application for Permit to Drill (21pp)

cc: SRRA, UT067 (wo/Enclosure)
State of Utah
Division of Oil, Gas, and Mining
1594 West North Temple, Suite 1210
P. O. Box 145801
Salt Lake City, Utah 84114-5801 (wo/Enclosure) ✓

VButts:vb:1/27/98